

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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6/24/82
1542K

June 24, 1982

Procurement Request Rationale
for Dead Creek, Sauget, IllinoisMichael C. O'Toole
On-Scene CoordinatorDave Bernstein
Emergency Response Division (WH-548-B)

The revised justification for limited solicitation and the procurement request rationale for the Dead Creek site security action are attached. Do not hesitate to call me at (312) 886-2008 if you have any additional questions concerning this matter.

Attachment

cc: Paige Peck, Procurement Operations Section, (PM-214-F)

MO'Toole:gmw:6-24-82:Remedial Response Section 01

CONCURRENCES

SYMBOL	RRS #	RRS II					
SURNAME	OTOOLE	RED					
DATE	6/24/82	6.24.82					

Justification for Limited Competition

Dead Creek is located in the towns of Sauget and Cahokia in St. Clair County, Illinois. The creek supplies drainage for part of the Mississippi River flood plain known as the American Bottoms. During the past forty years Dead Creek has received industrial wastes from a variety of industries including the Harold Waggoner Trucking Company, Monsanto Corporation, Midwest Rubber Reclaiming Company, Chemical Warfare Service Division of the U.S. Army, Lewin Metals Company (now the Cerro Copper Company), American Zinc (now AMAX Zinc), LuBright Refinery (now a Mobil Oil Marketing Terminal) and Empire Disposal. A majority of these discharges were eliminated prior to 1971 when a culvert under New Queeny Avenue was plugged. These industrial wastes are now discharged to the Sauget Wastewater Treatment plant.

The Illinois Environmental Protection Agency (IEPA) became aware of this site in May 1980 when local citizens reported that the mostly-dry creek bed would periodically catch fire. It wasn't until late August 1980, that IEPA learned that a nearby resident's dog died of chemical burns after rolling in the creek bed. At this point IEPA began testing the soil and the groundwater in both Dead Creek and a quarry pond adjacent and connected to the creek. IEPA's analyses revealed gross contamination of the surficial soils in a half mile stretch of the creek bed between New Queeny Avenue and Judith Lane. The creek was blocked at Judith Lane which prevented contaminated waters from being transported downstream. Concentration of several metals including barium, copper, lead, nickel, phosphorous and zinc exceeded several thousand parts per million (ppm). Polychlorinated biphenyls (10000 ppm), dichlorobenzene (12000 ppm), xylene (540 ppm), trichlorobenzene (3700 ppm), chloronitrobenzene (240 ppm), biphenyl (9000 ppm), dichlorophenol (170 ppm), alkylbenzenes (370 ppm), naphthalenes (650 ppm), and hydrocarbons (21000 ppm) were also identified in a few of the samples.

In September 1980, after discovering the extent of the surficial soil contamination IEPA with the cooperation of the Illinois Department of Transportation (IDOT) installed 7000 feet of snow fence around the creek between New Queeny Avenue and Judith Lane thereby limiting public access to the site.

In March 1982 USEPA visited the site and found the snow fence trampled down in several spots. Moreover, only one warning sign was visible along the entire portion of the creek. Local residents also reported that children frequent the creek and ride motorcycles through the bottom. With the summer months approaching IEPA feels it is necessary to secure the site more adequately. IDOT does not have the necessary funds to reinstall the fence.

Since school has recessed for the summer it is imperative that the contract be finalized and work begun within the next thirty days. This will insure that the public health of the local residents and their children will be protected by preventing easy accessibility to the contaminated portions of the creek. Therefore, the amount of time needed to place a contract is not sufficient to allow for unlimited competition which normally takes 90-120 days. Soliciting the six enumerated companies who are all located near Cahokia will significantly shorten the time between solicitation and receipt of proposals.

The recommended contractors are listed below:

Chesley Fence
New Baden, IL
(618) 398-4445

Linn Fencing
305 W. Embassey
Fairview Heights, IL
(618) 632-9081

Caseyville Fence Company
24 Sycamore
Caseyville, IL
(618) 345-5366

East Side Fence
3418 Centreville Avenue
Belleville, IL
(618) 235-7091

Granite Fence Company
1746 Edison
Granite City, IL
(618) 877-5400

Metro Belleville Fence, Inc.
2107 East A
Belleville, IL.
(618) 233-0176

The IEPA is familiar with all of these firms and feel they are all qualified to conduct the work.

Due to the emergency of this action priority handling is requested.

William N. Hedeman, Jr., Director
Office of Emergency & Remedial Response

Procurement Request Rationale

1) Title of Project

Installing security fencing around a portion of Dead Creek in Cahokia, Illinois.

2) Period of Performance

The period of performance is 40 working days.

3) Project Officer

The project On-Scene Coordinator will be Michael O'Toole (312-886-3008).

4) Background

Dead Creek is located in the towns of Sauget and Cahokia in St. Clair County, Illinois (Figure 1). The creek supplies drainage for part of the Mississippi River flood plain known as the American Bottoms. It starts in the town of Sauget and flows southwest through Cahokia until it discharges into the Prairie Du Pont Floodway. The Floodway in turn discharges to the Cahokia Chute of the Mississippi River (Figure 2).

During the past forty years Dead Creek has received industrial wastes from a variety of industries including the Harold Waggoner Trucking Company, Monsanto Corporation, Midwest Rubber Reclaiming Company, Chemical Warfare Service Division of the U.S. Army, Lewin Metals Company (now the Cerro Copper Company), American Zinc (now AMAX Zinc), LuBright Refinery (now a Mobil Oil Marketing Terminal) and Empire Disposal. A majority of these discharges were eliminated prior to 1971 when a culvert under New Queeny Avenue was plugged. These industrial wastes are now discharged to the Sauget Wastewater Treatment plant.

The Illinois Environmental Protection Agency (IEPA) became aware of this site in May 1980 when local citizens reported that the mostly-dry creek bed would periodically catch fire. It wasn't until late August 1980, that IEPA learned that a nearby resident's dog died of chemical burns after rolling in the creek bed. At this point IEPA began testing the soil and the groundwater in both Dead Creek and a quarry pond adjacent and connected to the creek. IEPA's analyses revealed gross contamination of the surficial soils in a half mile stretch of the creek bed between New Queeny Avenue and Judith Lane (Figure 2). The creek was blocked at Judith Lane which prevented contaminated waters from being transported downstream. Concentration of several metals including barium, copper, lead, nickel, phosphorous and zinc exceeded several thousand parts per million (ppm). Polychlorinated biphenyls (10000 ppm), dichlorobenzene (12000 ppm), xylene (540 ppm), trichlorobenzene (3700 ppm), chloronitrobenzene (240 ppm), biphenyl (9000 ppm), dichlorophenol (170 ppm), alkylbenzenes (370 ppm), naphthalenes (650 ppm), and hydrocarbons (21000 ppm) were also identified in a few of the samples.

In September 1980, after discovering the extent of the surficial soil contamination IEPA with the cooperation of the Illinois Department of Transportation (IDOT) installed 7000 feet of snow fence around the creek between New Queeny Avenue and Judith Lane thereby limiting public access to the site.

In March 1982 USEPA visited the site and found the snow fence trampled down in several spots. Moreover, only one warning sign was visible along the entire portion of the creek. Organic odors were evident near Queeny Avenue and pools of polluted water (oil films) were found in the northern portion of Dead Creek. Recent chemical dumping was also evident 100 feet west of Dead Creek, 100 feet south of New Queeny Avenue and 100 feet south of Dead Creek on the eastern bank. Local residents also reported that children frequent the creek and ride motorcycles through the bottom. With the summer months approaching IEPA feels it is necessary to secure the site more adequately. IDOT does not have the necessary funds to reinstall the fence.

5) Procurement Abstract

To install 5000 feet of chain link fence around a portion of Dead Creek between New Queeny Avenue and Judith Lane in the City of Cahokia, Illinois. The fence should be erected along the same boundary as the existing snow fence.

6) Statement of Work

Products

- a) Fence - Chain link wire fabric shall be made of No. 9 gauge galvanized steel wire, woven in a 2 inch mesh. Top and bottom edges shall be twisted and barbed. The fabric will be one piece with a width of 72 inches.
- b) Barbed Wire - Galvanized steel wire shall consist of two strands of No. 12 1/2 gauge steel wire with four point barbs on five inch centers.
- c) Posts and Bracing - Pipe line posts shall be 2" OD galvanized steel pipe.

Corner and gate posts shall be 3" OD galvanized steel pipe.

Bracing and top rail shall be 1 - 5/8" OD galvanized steel pipe.

Gates - One gate will be necessary. The width of the opening will be 16' with two leaves 8' wide. Gate frames shall be 1-1/2" OD galvanized steel. The gate shall be properly braced and trussed to prevent sagging, buckling and weaving and shall be covered with the same type of fabric as the fence.

Vertical end members of the gate frame shall extend one foot above the top horizontal member and carry three strands of barbed wire.

The gate shall be furnished complete with necessary fittings and hardware. Latches are to be provided for the use of padlocks. Hinges shall permit the gate to swing 180 degrees.

Execution

Preparation and Clearing

The fence shall be installed on a sufficiently uniform prepared grade so the maximum ground clearance shall not exceed 3 inches.

The contractor shall remove the existing snow fence, all loose debris and vegetation for proper installation of the fence. The snow-fence and the posts will be removed from the site by the IEPA. Any debris or vegetation will be left on-site.

Concrete Footings

Waste material from the excavation shall remain on-site. Post holes shall be thoroughly cleared of loose material.

All posts shall be set in a concrete base, which shall be six inches deeper than the bottom end of the posts. Tops of concrete bases shall be finished with a one inch crown from post to edge of base which shall be 3" above finished grade. Total depth of the concrete shall be 3' - 6" from crown to bottom with 3' - 0" post embedment. The diameter of the foundation shall be a minimum of nine inches. Concrete shall be allowed to cure a minimum of 72 hours before any further work is done on the posts.

Posts - Post tops shall be of the design required to accommodate the top rail and barbed wire extension arms. Barbed wire extension arms shall be securely anchored to posts and turned outward at an angle of 45 degrees.

Line and brace posts shall be set not more than 10 feet on centers in the line of the fence.

Ten corner and gate posts will be required.

Rails and Bracings - Top rail shall be installed prior to installation of chain-link fabric. A manufacturer's standard expansion-contraction coupler shall be provided every 100 feet or fraction thereof. Straight runs between braced posts shall not exceed 500 feet. End clamps shall be used for attaching top rail and braces to brace, terminal, and gate posts. Corner clamps shall be used for attaching top rail and braces at corner posts.

Horizontal braces and adjustable diagonal bracing extending to the first adjacent line post shall be provided at each corner, and gate post.

Fabric and Barbed Wire - Fabric shall be pulled taut and secured to the top rail close to both sides of each post and at intervals of not more than 24 inches on centers and to the intermediate posts at intervals of not more than 14 inches on corner, brace, and gate posts with stretcher bars and stretcher-bar bands.

Three strands of barbed wire shall be installed on extension arms above the fence posts. Each strand shall be pulled taut and securely fastened to the extension arms in the manner recommended by the manufacturer.

Wire shall be attached to terminal, corner, brace, and gate posts with wire stretching bands. Barbed wire on gate tops shall be furnished with the gate.

Gates - Gate leaves shall have intermediate members and diagonal truss rods or tubular members as necessary to provide rigid construction.

Fabric shall be attached to gate frame ends by use of bolt hooks, stretcher-bar bands, and stretcher bars or by other methods standard with the manufacturer. Welding the fabric to the gate frame will not be permitted. The top and bottom of the fabric shall be attached with wire ties at intervals not exceeding 14 inches on centers.

A padlock will be provided with matching chains securely attached to the gate or gate posts.

7) Proposed Budget

a) Fence installation - \$70,000

8) Reports

Oral reports by the contractor or his representative to the On-Scene Coordinator (OSC) should take place on a weekly basis. Progress of the work, difficulties and problems being encountered and costs incurred to date should be discussed.

9) List of Recommended Sources

Chesley Fence
New Baden, IL
(618) 398-4445

Linn Fencing
305 W. Embassey
Fairview Heights, IL
(618) 632-9081

Caseyville Fence Company
24 Sycamore
Caseyville, IL
(618) 345-5366

East Side Fence
3418 Centreville Avenue
Belleville, IL
(618) 235-7091

Granite Fence Company
1746 Edison
Granite City, IL
(618) 877-5400

Metro Belleville Fence, Inc.
2107 East A
Belleville, IL
(618) 233-0176

10) Evaluation Criteria Weight

This contract will be given on the basis of cost alone, no technical review will be necessary.

11) IUSEPA - Furnished Services

An On-Scene Coordinator and his delegate will be available for technical advice and on site monitoring.

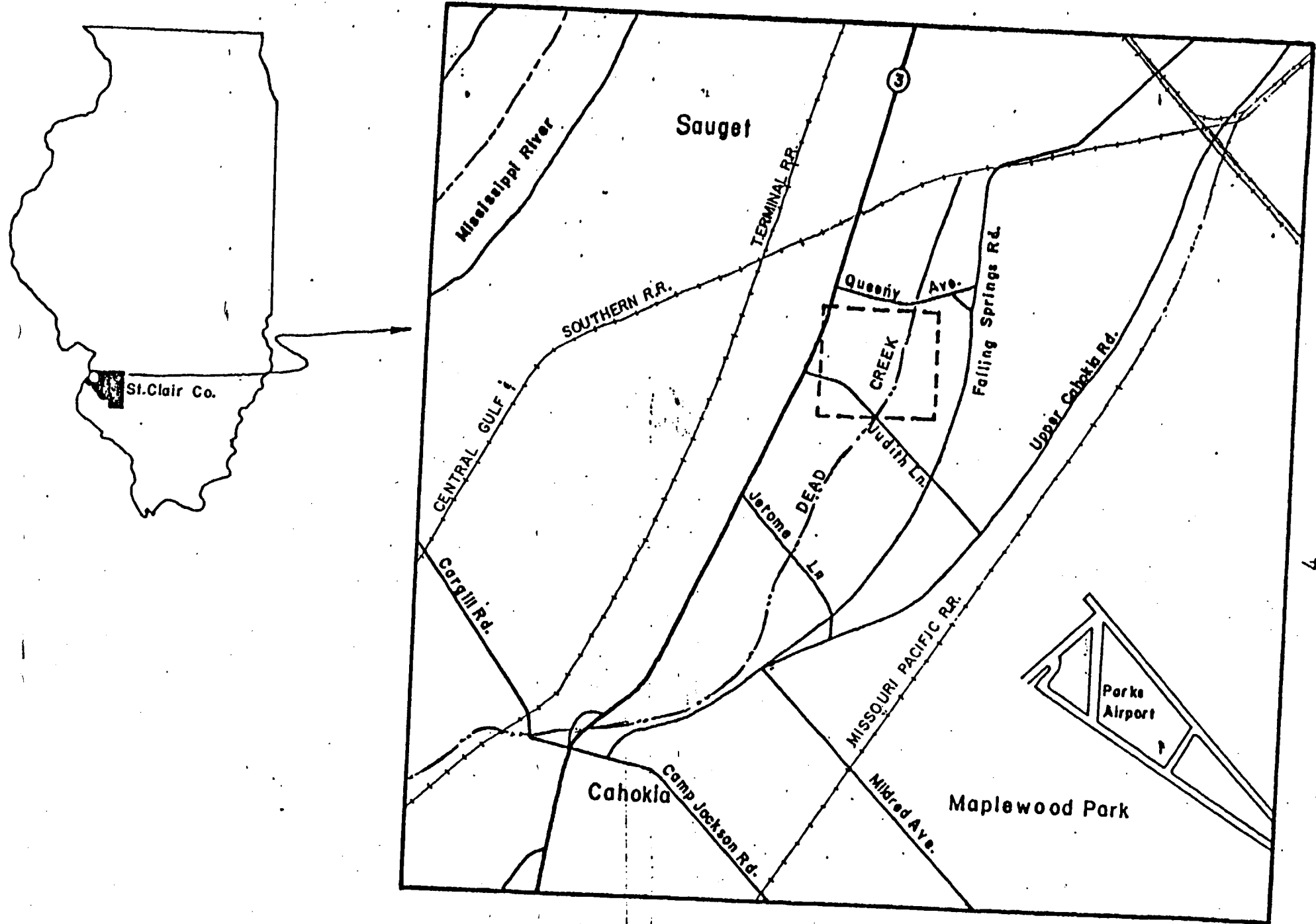


Figure 1. Location of Dead Creek and study site (square)

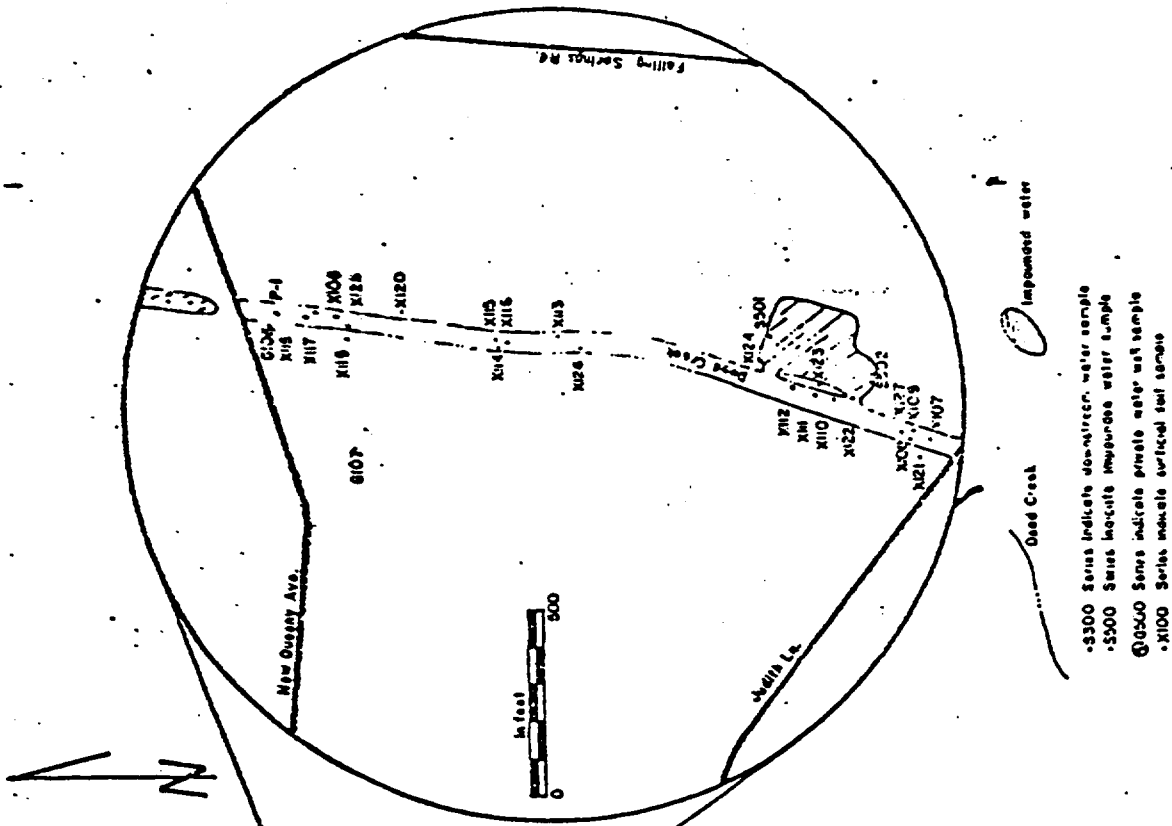


FIGURE 2

